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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,891	12/20/2001	Mark B. Roller	MIT-264	3207
27777	7590	10/20/2005	EXAMINER	
PHILIP S. JOHNSON JOHNSON & JOHNSON ONE JOHNSON & JOHNSON PLAZA NEW BRUNSWICK, NJ 08933-7003			DAVIS, DANIEL J	
			ART UNIT	PAPER NUMBER
			3733	

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/027,891	Applicant(s) ROLLER ET AL.	
	Examiner D. Jacob Davis	Art Unit 3733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2005.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election with traverse of the election requirement in the reply filed on February 5, 2005 is acknowledged. The traversal is on the ground(s) that it would not be an undo Burdon on the examiner to search all species. This is not found persuasive because text searching several materials is time intensive.

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-7 and 9-12 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. Publication 2004/0082998 to Shinomiya et al. in view of applicants' admitted prior art and in further view of WO 93/15682 to Small et al. Shinomiya discloses first and second bioabsorbable contacting surfaces. The surfaces may be made of polyglycolic acid (Abstract). The reference fails to disclose a bioabsorbable coating. Applicants admit in the specification on page 2, paragraph 4, "For example it is known to apply a thin layer of a low coefficient of friction

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coating (ceramic or diamond-like carbon) on one or more contact surfaces. Such a coating reduces friction between the surfaces of a bone fixing device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to coat either one or both of the contact surfaces of the Shinomiya reference, as taught by the admitted prior art, in order to reduce friction (and hence "device drag").

The coating taught in the admitted prior art is not bioabsorbable. Nevertheless, Smart teaches a bioabsorbable screw having a bioabsorbable coating. The coating has a "low coefficient of friction" (page 9, paragraph 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the ceramic coating for a bioabsorbable one so that the entire device can be absorbed into the body. Smart teaches that polyglycolic acid (PGA) is glycolide, and that PGA may be used as a low friction coating (page 9, paragraphs 2 and 3).

Claims 4, 8 and 13 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. Publication 2004/0082998 to Shinomiya et al. in view of applicants' admitted prior art, in view of WO 93/15682 to Small et al., in view of EP O 441 537 to Bezwada et al., and in further of U.S. Patent No. 4,547,542 to Lundberg et al. Small teaches a copolymer of 85 epsilon-caprolactone and 15 glycolide. Bezwada teaches that instead of 85 percent, the preferred mole ratio for epsilon-caprolactone is 90 percent (page 2, lines 53-54). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the epsilon-caprolactone mole ratio from 85 percent to 90 percent, as taught by Bezwada.

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Lundberg teaches that epsilon caprolactone may be modified to polycaprolactone to make it more adhesive (Abstract and column 5, lines 50-66). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the epsilon-caprilactone coating, as taught by Lundberg, to create polycaprolactone enabling the coating to more effectively adhere to the surface of the Shinomiya device.

### ***Response to Arguments***

Applicant's arguments filed February 5, 2005, with respect to the rejections under 35 U.S.C. 103(a) have been fully considered and are persuasive since the Cooper reference was commonly owned at the time the present invention was made. Therefore the rejections under U.S.C. 103(a) as being unpatentable over Cooper are withdrawn. However, upon further consideration, new ground(s) of rejection is made in view of Shinomiya et al., which reference teaches a bioabsorbable plate made of polylactic acid (Abstract).

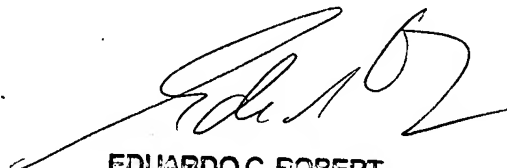
Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. Jacob Davis whose telephone number is (571) 272-4693. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo C. Robert can be reached on (571) 272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DJD



EDUARDO C. ROBERT  
PRIMARY EXAMINER